

April 5, 2006



U.S. Department
of Transportation

400 Seventh Street, S.W.
Washington, D.C. 20590

**Pipeline and
Hazardous Materials
Safety Administration**

DOT-SP 12405
(SEVENTH REVISION)

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: (See individual authorization letter)
2. PURPOSE AND LIMITATION:
 - a. This special permit authorizes the transportation in commerce of the hazardous materials described in paragraph 6 below in certain DOT specification seamless steel cylinders. This special permit provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
 - b. The safety analyses performed in development of this special permit only considered the hazards and risks associated with transportation in commerce. The safety analyses did not consider the hazards and risks associated with consumer use or other uses not associated with transportation in commerce.
 - c. Unless otherwise stated herein, this special permit consists of the special permit authorization letter issued to the grantee together with this document.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.304a(a)(2) in that a higher permitted filling density is authorized; and § 173.304(b) in that cylinders may be liquid full at temperatures below 130°F.
5. BASIS: This special permit is based on the application of Air Products and Chemicals, Inc. (APCI) dated September 1, 2004, submitted in accordance with § 107.109 and supplemental information dated April 5, 2006.

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Hazardous Materials Description			
Proper Shipping Name	Hazard Class/Division	Identification Number	Packing Group
Ethane	2.1	UN1035	N/A
Hexafluoroethane or Refrigerant gas R116	2.2	UN2193	N/A
Hydrogen chloride, anhydrous	2.3	UN1050	N/A Hazard Zone C
Sulfur hexafluoride	2.2	UN1080	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING -Prescribed packagings are DOT Specification 3A, 3AA, 3AX, 3AAX, or 3T cylinders with a service pressure of 2400 psig and a test pressure of 4000 psig.

b. OPERATIONAL CONTROLS -

(1) The maximum permitted fill density of each gas is as follows:

Hazardous Material	Maximum Fill Density (See Note 1)
Hydrogen Chloride	73.8
Ethane	37
Sulfur Hexafluoride	149
Hexafluoroethane (Freon 116)	117

Note 1: Fill density is defined as the percent ratio of the weight of the gas in a cylinder to the weight of the water that the cylinder will hold at 60°F.

(2) The pressure in the cylinder may not exceed 95 percent of the cylinders test pressure at 65°C (149°F).

(3) The pressure in the cylinder may not exceed 90 percent of the start-to-discharge pressure of the cylinders pressure relief device at 54.4°C (130°F).

(4) The critical temperature (T_c) of each gas must be above 15°C (59°F) and below 65°C (149°F).

(5) The maximum tolerance of the scale must be +/- 0.5%.

(6) For each gas authorized in paragraph 6 of this special permit, the grantee and persons holding party status must take a minimum of one representative cylinder for the purpose of a pressure/temperature monitoring test. The cylinder must be selected from those that are filled for shipment in accordance with paragraph 7.b.(1). The temperature of the gas in each selected cylinder must be uniformly raised with the temperature and pressure being recorded every 10°F until the gas temperature has reached 65°C (149°F). The data collected shall be summarized and presented to the OHMEA prior to renewal of the special permit.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this special permit who receives a package covered by this special permit may reoffer it for transportation provided no modification or change is made to the cylinder or its content and it is reoffered for transportation in conformance with this special permit and the HMR.

b. A current copy of this special permit must be maintained at each facility where the package is offered or reoffered for transportation.

c. Each cylinder must be plainly and durably marked "DOT-SP 12405" as specified in § 172.301(c).

- d. Packagings permanently marked 'DOT-E 12405', prior to October 1, 2007 may continue to be used under this special permit for the remaining service life of the packaging or until the special permit is no longer valid. Packagings marked on or after October 1, 2007 must be marked 'DOT-SP 12405'.
- e. Shipping papers displaying 'DOT-E 12405 may continue to be used until October 1, 2007, provided the special permit remains valid.
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this special permit must be carried aboard each cargo vessel and motor vehicle used to transport packages covered by this special permit.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this special permit and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:
- o All terms and conditions prescribed in this special permit and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
 - o Persons operating under the terms of this special permit must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.
 - o Registration required by § 107.601 et seq., when applicable.

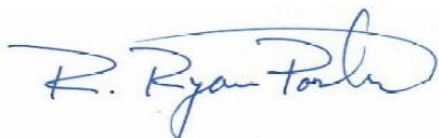
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this special permit must receive training on the requirements and conditions of this special permit in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this special permit, including display of its number, when this special permit has expired or is otherwise no longer in effect.

Under Title VII of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)- 'The Hazardous Materials Safety and Security Reauthorization Act of 2005' (Pub. L. 109-59), 119 Stat. 1144 (August 10, 2005), amended the Federal hazardous materials transportation law by changing the term 'exemption' to 'special permit' and authorizes a special permit to be granted up to two years for new special permits and up to four years for renewals.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this special permit.) In addition, the holder(s) of this special permit must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this special permit.

Issued in Washington, D.C.:



for Robert A. McGuire
Associate Administrator
for Hazardous Materials Safety

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: PHH-31.

Copies of this special permit may be obtained by accessing the Hazardous Materials Safety Homepage at http://hazmat.dot.gov/sp_app/special_permits/spec_perm_index.htm Photo reproductions and legible reductions of this special permit are permitted. Any alteration of this special permit is prohibited.

PO: MMT/sln